



# Surveillance Impact Report

Drones or Unmanned Aerial Vehicles  
Fire Department

As required by San Francisco Administrative Code, Section 19B, departments must submit a Surveillance Impact Report for each surveillance technology to the Committee on Information Technology ("COIT") and the Board of Supervisors.

The Surveillance Impact Report details the benefits, costs, and potential impacts associated with the Department's use of Drones or Unmanned Aerial Vehicles.

## DESCRIPTION OF THE TECHNOLOGY

The Department's mission is: to protect the lives and property of the people of San Francisco from fires, natural disasters, and hazardous materials incidents; to save lives by providing emergency medical services; to prevent fires through prevention and education programs; and to provide a work environment that values health, wellness and cultural diversity and is free of harassment and discrimination.

In line with its mission, the Department uses Drones or Unmanned Aerial Vehicles to facilitate saving lives and property, enhance Firefighter safety and improve emergency response actions by providing aerial reconnaissance and observation to the Incident Commander to support strategic and tactical decisions at emergencies, major incidents and/or disasters. The SFFD will use uniformed personnel or an authorized contractor to operate the Drone

Fire Department shall use Drones or Unmanned Aerial Vehicles only for the following authorized purposes:

*Authorized Use(s):*

- |  |
|--|
| 1. Disaster Response: Assessment and District Surveys        |
| 2. Emergency Response: Building Fire Reconnaissance          |
| 3. Search & Rescue: Aerial or water borne drones.            |
| 4. Training: Assessment and evaluation of emergency response |

**Prohibited use cases involve any uses not stated in the Authorized Use Case section.**

The following use cases are expressly prohibited.

1. Use of drone technology to intentionally capture images of a personal nature will always be prohibited.

Fire Department Drone technology is located in the following areas: Disaster areas, emergency evacuation routes, and other areas within San Francisco requiring Fire Department safety response operations.

## Technology Details

The following is product description of Drones or Unmanned Aerial Vehicles:

DJI Matrice 210 is an aerial survey drone that is equipped with both an aerial zoom and thermal camera. First responders can now quickly locate missing people in remote areas and plan the safest approach path.

A. How It Works

To function, Drones or Unmanned Aerial Vehicles incorporate unmanned, remotely-operated aircraft with onboard visual recording equipment, for the purpose of capturing images from an aerial perspective.

Data collected or processed by Drones or Unmanned Aerial Vehicles will not be handled or stored by an outside provider or third-party vendor on an ongoing basis. The Department will remain the sole Custodian of Record.

**IMPACT ASSESSMENT**

The impact assessment addresses the conditions for surveillance technology approval, as outlined by the Standards of Approval in San Francisco Administrative Code, Section 19B:

- A. The benefits of the surveillance technology outweigh the costs.
- B. The Department's Policy safeguards civil liberties and civil rights.
- C. The uses and deployments of the surveillance technology are not based upon discriminatory or viewpoint-based factors and do not have a disparate impact on any community or Protected Class.

The Department's use of the surveillance technology is intended to support and benefit the residents of San Francisco while minimizing and mitigating all costs and potential civil rights and liberties impacts of residents.

A. Benefits

The Department's use of Drone technology has the following benefits for the residents of the City and County of San Francisco:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Education   | Drone imagery to promote Fire Department safety messaging and disaster preparedness |
| <input type="checkbox"/> Community Development  |   |
| <input type="checkbox"/> Health                 |   |
| <input checked="" type="checkbox"/> Environment | Drone imagery to identify any hazardous material response and mitigation            |
| <input type="checkbox"/> Criminal Justice       |   |
| <input type="checkbox"/> Jobs                   |   |
| <input type="checkbox"/> Housing                |   |
| <input checked="" type="checkbox"/> Other       | Public Safety: emergency response as indicated in authorized use cases              |

## B. Civil Rights Impacts and Safeguards

The Department has considered the potential impacts and has identified the technical, administrative, and physical protections as mitigating measures:

The San Francisco Fire Department strives to mitigate all potential civil rights impacts through responsible technology and associated data use policies and procedures. The Fire Department intends to use drones and their associated data exclusively for aforementioned authorized uses cases. All other uses, including surveillance of San Francisco residents or groups, are expressly prohibited.

To protect drone data from potential breach, misuse or abuse that may result in civil rights impacts, data is maintained on secure, department-owned servers. Only persons authorized to utilize the raw data may access the information and are required to maintain records of access by completing the drone data access log described in section 3.23.

Only data that has been edited to remove PII will be shared and stored on servers, and sharing will only occur with partner CCSF agencies on a case by case basis or as required by law. To mitigate any potential impacts to residents' physical safety or economic loss through property damage, all SFFD drone operators receive pilot training and are required to sign the Department's Drone Use Policy.

Recorded data will not be collected, disseminated or retained solely for the purpose of monitoring activities protected by the U.S. Constitution, such as the First Amendment's protections of religion, speech, press, assembly, and redress of grievances (e.g., protests, demonstrations). Collection, use, dissemination, or retention of recorded data should not be based solely on individual characteristics (e.g., race, ethnicity, national origin, sexual orientation, gender identity, religion, age, or gender), which is a violation of the law.

## C. Fiscal Analysis of Costs and Benefits

The Department's use of Drones or Unmanned Aerial Vehicles yields the following business and operations benefits:

<b>Benefit</b>	<b>Description</b>	<b>Quantity/Units</b>
<input checked="" type="checkbox"/> Financial savings	Drones can be far more time efficient and cost effective when conducting emergency response and gaining rapid situational awareness in a disaster.	
<input checked="" type="checkbox"/> Time savings	Deploying a drone can provide time savings locating victims in a variety of environments as well as gain situational awareness and hazard assessment.	
<input checked="" type="checkbox"/> Staff safety	Drones can be deployed to dangerous locations instead of personnel, such as rooftops, at the sides of building/bridges, along cliff areas or areas prone to erosion.	
<input checked="" type="checkbox"/> Improved data quality	Dome locations which are difficult to access by personnel may be more easily photographed using drone technology, thereby achieving better data.	
<input type="checkbox"/> Other		

The total fiscal cost, including initial purchase, personnel and other ongoing costs is

FTE (new & existing)	0		
Classification	N/A		
	<b>Annual Cost</b>	<b>Years</b>	<b>One-Time Cost</b>
Total Salary & Fringe	\$5,000	1	\$0
Software	\$1,000	1	\$1,000
Hardware/Equipment	\$0	1	\$25,000
Professional Services	\$0	1	\$0
Training	\$1,000	1	\$0
Other	\$0	0	\$0
<b>Total Cost [Auto-calculate]</b>	<b>\$26,000</b>		

2.1 Please disclose any current or potential sources of funding (e.g. potential sources = prospective grant recipients, etc.). <sup>SIR, ASR</sup>

This project was initially funded by a Homeland Security grant, but further costs would be relegated to the Department's general fund budget

The Department funds its use and maintenance of the surveillance technology through

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**COMPARISON TO OTHER JURISDICTIONS**

Drones or Unmanned Aerial Vehicles are currently utilized by other governmental entities for similar purposes.

**APPENDIX A: Surveillance Impact Report Requirements**

The following section shows all Surveillance Impact Report requirements in order as defined by the San Francisco Administrative Code, Section 19B.

1. Information describing the Surveillance Technology and how it works, including product descriptions from manufacturers.

Drone technology incorporates unmanned, remotely-operated aircraft with onboard visual recording equipment, for the purpose of capturing images from an aerial perspective.

DJI Matrice 210 is an aerial survey drone that is equipped with both an aerial zoom and thermal camera. First responders can now quickly locate missing people in remote areas and plan the safest approach path."

2. Information on the proposed purpose(s) for the Surveillance Technology.

The mission of the SFFD Drone Program is to facilitate saving lives and property, enhance Firefighter safety and improve emergency response actions by providing aerial reconnaissance and observation to the Incident Commander to support strategic and tactical decisions at emergencies, major incidents and/or disasters. The SFFD will use uniformed personnel or an authorized contractor to operate the Drone.

3. If applicable, the general location(s) it may be deployed and crime statistics for any location(s).

During disaster/emergency response operations: Disaster areas, emergency evacuation routes, and other areas within San Francisco requiring Fire Department safety response operations.

4. An assessment identifying any potential impact on civil liberties and civil rights and discussing any plans to safeguard the rights of the public.

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To protect drone data from potential breach, misuse or abuse that may result in civil rights impacts, data is maintained on secure, department-owned servers. Only persons authorized to utilize the raw data may access the information and are required to maintain records of access by completing the drone data access log described in section 3.23. Only data that has been edited to remove PII will be shared and stored on servers, and sharing will only occur with partner CCSF agencies on a case by case basis or as required by law.

To mitigate any potential impacts to residents' physical safety or economic loss through property damage, all SFFD drone operators receive pilot training and are required to sign the Department's Drone Use Policy.

UAS-recorded data will not be collected, disseminated or retained solely for the purpose of monitoring activities protected by the U.S. Constitution, such as the First Amendment's protections of religion, speech, press, assembly, and redress of grievances (e.g., protests, demonstrations).

Collection, use, dissemination, or retention of UAS-recorded data should not be based solely on individual characteristics (e.g., race, ethnicity, national origin, sexual orientation, gender identity, religion, age, or gender), which is a violation of the law.

5. The fiscal costs for the Surveillance Technology, including initial purchase, personnel and other ongoing costs, and any current or potential sources of funding.

Number of FTE (new & existing)	<input type="text" value="0"/>
Classification	<input type="text" value="N/A"/>
Total Salary & Fringe	<input type="text" value="\$0"/>
Software	<input type="text" value="\$1,000"/>
Hardware/Equipment	<input type="text" value="\$25,000"/>
Professional Services	<input type="text" value="\$0"/>
Training	<input type="text" value="\$0"/>
Other	<input type="text" value="\$0"/>
Total Cost [Auto-calculate]	<input type="text" value="\$26,000"/>

This project was initially funded by a Homeland Security grant, but further costs would be relegated to the Department's general fund budget

6. Whether use or maintenance of the technology will require data gathered by the technology to be handled or stored by a third-party vendor on an ongoing basis.

Handled by third-party vendor, ongoing:

Vendor name:

Special data handling required:

7. A summary of the experience, if any, other governmental entities have had with the proposed technology, including information about its effectiveness and any known adverse information about the technology such as anticipated costs, failures, or civil rights and civil liberties abuses.

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**APPENDIX B: Mapped Crime Statistics**

The general location(s) it may be deployed and crime statistics for any location(s):

During disaster/emergency response operations: Disaster areas, emergency evacuation routes, and other areas within San Francisco requiring Fire Department safety response operations.